



NOVA

University of Newcastle Research Online

nova.newcastle.edu.au

Chojenta, Catherine; Mingay, Edwina; Gresham, Ellie & Byles, Julie. "Cooking for one or two: applying participatory action research to improve community-dwelling older adults' health and well-being (letter)" Published in the *Health Promotion Journal of Australia*, Vol. 29, Issue 1, pp. 105-107, (2018).

Available from: <http://dx.doi.org/10.1002/hpja.35>

This is the peer reviewed version of above article, which has been published in final form at <http://dx.doi.org/10.1002/hpja.35>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions.

Accessed from: <http://hdl.handle.net/1959.13/1400179>

Cooking for One or Two: Applying participatory action research to improve community-dwelling older adults' health and wellbeing

Catherine Chojenta¹, Edwina Mingay¹, Ellie Gresham^{1,2} and Julie Byles¹

1. Research Centre for Generational Health and Ageing, School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, Callaghan, New South Wales, 2308, Australia
2. School of Allied Health Sciences, Griffith University, Southport, Queensland, 4215, Australia

Author	Qualifications
C.Chojenta	BA (Psych) Hons, PhD
E.Mingay	BNutrDiet (Hons), APD
E.Gresham	BNutrDiet (Hons), PhD, APD
J.Byles	B Med, PhD

Conflict of interest

None to declare

Acknowledgements

The authors thank Ms Natalie Edwards and Ms Samantha Diamond who assisted with data collection. Thank you also to the University of Newcastle student dietitians who worked on this project: Seth Bowes, Katherine Brain, Kimberley Griffith, Yu Qi Lee, Sasha Lorien, Emma Meyers, Stephanie Grubb, Andrea MingLi Ng, James Morris and Megan Francis Roberts.

Financial disclosure

This project was funded by a Department of Veterans' Affairs Veteran & Community Grant (CC213562). The granting agency was not involved in the conduct or management of the study and was not involved in the research output arising from this study, including this manuscript.

Cooking for One or Two is an Australian-based cooking skills program initially designed for community-dwelling older veteran men to improve their health and wellbeing and reduce their risk of malnutrition. The program involves five education sessions over five weeks teaching cooking skills and healthy behaviours while providing a forum for social interaction. Each session includes an interactive demonstration of cooking skills and preparation of a meal to share, and is supplemented with health promotion information on good nutrition and topics such as physical activity, medications, and safe alcohol consumption.

Here we describe processes employed to expand *Cooking for One or Two* to increase its reach both within and beyond the veteran community, and encourage engagement beyond the original five-week program. The research team collaborated with participants and volunteer coordinators of the program through i) provision of a health promotion book built around additional recipes, ii) development of 'masterclasses' to extend participants' learning, and iii) updating of course materials to be available for open access free download. A Participatory Action Research (PAR) framework was employed to guide this redevelopment, and include the target population in the program development process.¹⁻³ PAR is a collaborative approach whereby representatives from the study population become research partners in the research process to identify their perceptions and experiences and translate them into action to influence social change.¹⁻³ This approach was used in order to understand participants' experiences with *Cooking for One or Two*, elicit their needs, identify facilitators and barriers to cooking, and to work with the participants to build relevant, evidence-based program materials.

Our results

The PAR approach included focus groups, development and road testing of selected recipes, telephone interviews, and development of educational materials for online peer-to-peer education. The *Cooking for One or Two* expansion project was granted approval on 29 August 2011 by the institution's Human Research Ethics Committee (H-2011-0252) Undergraduate students enrolled in the Bachelor of Nutrition and Dietetics at the authors'

institution assisted with recruitment, data collection and summarising of results. The project was conducted over three stages.

Stage One involved development of a draft '*Recipes for Life*' book, through focus groups, expert consultation in the review of health promotion guidelines, and nutritional analysis of recipes. In order to evaluate the appropriateness of recipes, nutritional and non-nutritional protocols were developed (Table 1) using Nutrient Reference Values for Australia and New Zealand (NRVs)⁴, Australian Guide to Healthy Eating (AGHE),⁵ and other nutritional guidelines for independently living and institutionalised older adults.⁶⁻¹⁰ Health promotion topics were determined through focus group discussions and consultation with health promotion experts such as a Fellow of the Dietetic Association of Australia, a Clinical Gerophysiological, a Professor of Public Health, and other senior program directors with expertise in certain fields. Information was sourced from peak Australian health bodies and peer-reviewed literature to ensure high quality evidence-based information was included. Materials were designed with ease of understanding, simple instructions and large printed format in mind.

We sought feedback on the draft book through three focus groups from past participants in *Cooking for One or Two*. Participants favoured recipes that were simple, involved minimal preparation, and could be frozen to utilise leftovers. Participants disliked recipes requiring lots of equipment and/or ingredients (particularly uncommon ingredients), and that were time consuming to prepare. Participants also suggested the inclusion of hints (or additional cooking instructions) on each recipe, to define unfamiliar terms, and to indicate whether recipes were suitable to freeze or were vegetarian.

The *Recipes for Life* book was amended based on this feedback and an updated version prepared for road testing by past participants of *Cooking for One or Two* (**Stage Two**).

Participants provided feedback on the recipes, and identified recipes they would and would

not cook, providing reasons why. Again, these results indicated the importance of simplicity of preparation.

The *Recipes for Life* book was completed with input from communications students and distributed to all previous *Cooking for One or Two* participants and is available online:

<http://www.dva.gov.au/about-dva/publications/health-publications/cooking-one-or-two-programme>.

To guide the future direction of the project, including expansion beyond the veteran community, a series of telephone interviews and an additional focus group were conducted **(Stage Three)**. Participants were recruited from previous *Cooking for One or Two* involvement and the wider community. Importantly, participants were interested in expanding their cooking skills, and identified topics of interest, such as new techniques and cuisines (eg slow-cooking, Italian food). Participants highlighted the need for education around food labels and making decisions at the supermarket, indicating a gap in the current program. Participants endorsed the availability of an online course, however suggested that instructional videos for technical skills would be of great benefit. Based on this feedback, new masterclasses have been developed and are available on the Department of Veterans' Affairs website.

Reflection on the PAR approach

The PAR approach was a critical component utilised at each stage of the expansion of *Cooking for One or Two*, to determine the target populations' cooking skills and techniques, nutrition knowledge, preferred recipes, facilitators and barriers to cooking (familiarity with ingredients, simplicity of instructions, equipment required, cooking time, food preferences and recipe appeal), and other lifestyle factors that affect health at older ages. This data formed the basis to build and strengthen program content. Findings have been used to expand program reach to include non-veteran community-dwelling older adults and the availability of the program online. While funding has not yet been available to produce the

suggested video material, information on the future needs from participants will continue to drive the program in close collaboration with the target population.

Another important driver of success was involvement of undergraduate students. As part of their degree, students assisted the research team with the conduct of the project, and were provided with a valuable experience in both research and community interventions for older people.

This project took an inductive approach to generate new ideas for the ongoing development of a community-based public health intervention. Using a PAR framework, which emphasises the involvement of the target population in all stages of project development, we developed a suite of products for use and dissemination beyond the original target population, while still considering their particular needs. We were also able to remain responsive to changes and improvements in technology. While maintaining rigour and best research practice throughout the process, the primary measure of success was the ongoing high level of interest and engagement from the target audience with both the research team and the program. The participants were active partners in the research process, and data collected through their reflective practice formed the basis to build and strengthen program content, in response to better understanding the complex health and social factors associated with ageing.

The authors declare no conflicts of interest.

REFERENCES

1. Blair T, Minkler M. Participatory Action Research with older adults: Key principles in practice. *Gerontologist* 2009;**49**(5): 651-62.
2. Hartnett T. Community-based Participatory Research: Expanding Partnerships Between Researchers and Communities. *Research Practitioner* 2015;**16**(2): 35-43.
3. Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. *Annu Rev Public Health* 1998;**19**(1): 173-202.
4. NHMRC. Nutrient reference values for Australia and New Zealand, including recommended dietary intakes. Canberra, Australia: National Health and Medical Research Council; 2006.
5. NHMRC. Australian dietary guidelines. Canberra: National Health and Medical Research Council; 2013.
6. Digby P. Nutrition and menu planning for Meals on Wheels services in Western Australia. . Perth: Western Australia: Department of Health 2008.
7. WA Department of Health. Menu assessment for aged care facilities checklist [Internet]. 2006 [28/06/2017]; Available from:
http://www.public.health.wa.gov.au/cproot/1587/2/Menu_Assessment_AgedCare.pdf.
8. NSW Health. Nutrition standards for adult inpatients in NSW hospitals [Internet]. 2011 [27/06/2017]; Available from:
https://www.aci.health.nsw.gov.au/_data/assets/pdf_file/0004/160555/ACI_Adult_Nutrition_web.pdf.
9. Krassie J. Destination: Good Nutrition. Stratfield: Open Training and Education Network-Distance (OTEN-DE) 2002.
10. VIC Department of Health. Home and Community Care. HACC Program Manual [updated 2011] [Internet]. 2003 [19/07/2011]; Available from:
http://www.health.vic.gov.au/hacc/prog_manual/.

Table 1: Nutritional and Non-Nutritional Protocol for the selection of recipes

Nutritional protocol	Light meals	Main meals	Dessert	Entertaining and beverages
Food group serves^(a):				
Grains	1-2	1-2	0-1	0-1
Vegetables and legumes	2-3	2-3	0	0-1
Fruit	0	0	½-1	0-1
Meat and alternatives	0-1½	1-1½	0	0-1
Dairy	0-1	0-1	1	0-1
Nutrient^(b):				
Energy (kJ)	1600-2000	2000-2500	1600-2000	n/a
Saturated fat (g)	≤5	≤7	≤5	n/a
Protein (g)	11-16 <i>Upper limit: 24-29</i>	14-20 <i>Upper limit: 30-37</i>	11-16 <i>Upper limit: 24-29</i>	n/a
Fibre (g)	≥5	≥6	≥3	n/a
Calcium (mg)	-	-	>300 <i>Upper limit: 600</i>	n/a
Iron (mg)	≥2 <i>Upper limit: 9</i>	≥2 <i>Upper limit: 11</i>	≥1 <i>Upper limit: 9</i>	n/a
Non-nutritional protocol for recipe selection				
<ul style="list-style-type: none"> • Serve two people^(c) • Methods involve six steps or less • Ingredients are easily sourced • Common ingredients are used • Limited equipment required and no unusual equipment needed to cook the recipe • Easy to cook • Can be modified 				

^(a)based on serve sizes for each core food group outlined in the Australian Dietary Guidelines⁵

^(b)based on the National Health and Medical Research Council nutrient reference values⁴

^(c) not applicable for entertaining and beverages recipes